Work Integrated Learning

For all students Making industry collaborations work

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Workshop Structure

- WIL Overview
- Self-evaluation of industry engagement
- National guidelines on industry engagement in engineering education
- Scenarios: connecting students to industry partners
- New WIL opportunities
- Wrap-up

Work Integrated Learning

QUT Definition

Students engage with an industry and/or community partner

Students undertake authentic activities for the partner

Students are assessed in relation to these authentic activities



Models of WIL

- Placements
 - Field experience, professional experience, community service placement, internship
- WIL Projects
 - Industry projects, community projects, work-based projects, fieldwork
- Service Learning
 - Community engaged learning, community based learning
- Other WIL activities
 - Site visits, shadowing, field observations, study tours
- On-site, On-campus

Enhancing Industry Engagement in Engineering Degrees

Best Practice Guidelines and the Reflection Tool

Male, S. A., & King, R. W. (2014). Best Practice Guidelines for Effective Industry Engagement in Australian Engineering Degrees. <u>https://www.engineersaustralia.org.au/sites/default/files/shado/</u> <u>ACED/aced_industry_engagement_guidelines.pdf</u>

Vision

By engaging in authentic problems, solutions, practices and roles, students will:

- 1. Improve their understanding of the concepts, tools and applications of disciplinary science and fundamental mathematics and sciences.
- 2. Comprehend the relevance of socio-technical competencies.
- 3. Develop the desired attitudes for practice.
- 4. Develop their identities as student professionals, and develop self-efficacy to achieve their goals.
- 5. Develop accurate perceptions of practice, in preparation for the transition to practice.



Research Design



Guidelines

- 2 Curriculum Themes
- 7 Recommendations for Faculties
- 3 Recommendations for Industry
- 6 Recommendations for Professional and Industry Bodies and Governments

(Recommendations listed on p3 in Guidelines)



Reflection on a Program

 Using the reflection tool, consider one program that you are involved in, using the dark blue curriculum themes [Individual]

What are the common strengths and gaps?
[Group]



| Theme | es and Relevant |
|-----------|----------------------|
| Keco | mmendations |
| Gu | idelines, p3 |
| Theme | Recommendations |
| 1a | F1 |
| 1b | F2,3,4,5,6,7 |
| 1c | F2,3,4,5 |
| 1d | F2,3,4,5,6,7 |
| 1e | F3,4 |
| 1f | F1b,c |
| 1g and 2c | F3,6,7 (e-portfolio) |



Priority Actions

1. Identify three ADTL priority actions to support WIL for all student [Group]

2. Report your strategies to the wider group [Group Spokesperson]



Connecting Students with Industry Partners



WIL Engagement Scenarios [30 minutes]

| Model | Describe a version of WIL that works in this context |
|------------|--|
| Processes | Identify the processes required to connect the industry partner with the right students, or vice versa |
| Resources | Identify resources and systems that are needed to successfully connect students and industry partners |
| Challenges | Describe the key challenges to engaging with your industry partner / learner to produce a positive outcome |

Reporting

- Up-and-Away
- Jenny and the team
- Just-Getting-Started
- Jiro
- Dr X and Advancing-IT
- Max

Innovation in WIL

- Service Learning
- Entrepreneurship
- Virtual WIL

http://www.olt.gov.au/project-virtual-workintegrated-learning-engineering-students-2015

Virtual WIL Benefits

- 1. More reliable WIL for more students
- 2. More diverse WIL experiences than in one placement
- 3. Site visits often not experienced in a placement
- 4. WIL throughout the program

Questions

- 1. Are you already using virtual WIL?
- 2. How can you see this being used in ICT?
- 3. How can you see it being resourced?
- 4. Would your university desire a modular model that you could expand?

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